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# Indian Standard CODE FOR SEAWORTHY PACKAGING OF COTTON HOSIERY YARN AND GOODS

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BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

# Indian Standard CODE FOR SEAWORTHY PACKAGING OF COTTON HOSIERY YARN AND GOODS

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#### IS:3086-1965

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# Indian Standard CODE FOR SEAWORTHY PACKAGING OF COTTON HOSIERY YARN AND GOODS

### 0. FOREWORD

- 0.1 This Indian Standard was adopted by the Indian Standards Institution on 14 April 1965, after the draft finalized by the Cotton Hosiery and Knitted Garments Sectional Committee had been approved by the Textile Division Council.
- 0.2 Packaging plays a very important part in preventing damage in handling and in the safe transport of goods, their storage and marketing. Proper packaging with quality packing materials protects the goods from the hazards of transit, provides for ease of handling and preserves the contents from infestation, contamination and other deterioration. This code gives details of seaworthy packaging of cotton hosiery yarn and goods which would ensure adequate protection to the contents of the packages which are to be shipped overseas.
- 0.3 Hosiery goods, especially of superior quality are often sent through post parcel, particularly when early delivery of goods are required. This code gives the details of packaging hosiery goods in such cases also.
- 0.3.1 The goods intended to be sent through post parcel are packed in cardboard boxes; the size and weight of such cardboard box should be in conformity with the international postal rules and regulations.

#### 1. SCOPE -

1.1 This code prescribes the method of packaging of cotton hosiery yarn and goods for overseas markets.

# 2. PACKING PROCEDURE

# 2.1 Hosiery Yarn (Hanks) in Bales

2.1.1 Make hanks of yarn into bundles of 5 kg or 2.5 kg. The each bundle securely with cotton twine at least at three places at right angles to the length of the hanks. Wrap each bundle in kraft paper. Place pieces of cardboard of suitable sizes, one each on top and bottom of the bundle so as to form a rectangular bundle and tie it securely with cotton or jute twine of suitable quality.

Nozz — To facilitate identification, each bundle may be marked with the name of the material, name and trade-mark of the manufacturer, count of yarn and nominal weight of the bundle.

2.1.2 Place a sufficient number of bundles (see 2.1.3) prepared as in 2.1.1 on the table of a baling press over layers of packing materials listed in Table 1, arranging the layers in such a manner that, when the bale is finally made up, the material listed first forms the innermost layer and the material listed last forms the outermost layer. Place similar layers of packing materials over the top of the arranged bundles. The packing materials shall be in sound, clean and dry condition and shall be of sufficient size to cover the bundles with adequate overlaps on all sides.

TABLE 1 LIST OF PACKING MATERIALS			
SL No.	LAYER	Material	Conforming to
1	Single	Kraft paper	Grade 2 of IS: 1397 - 1960*
	Single	Polyethylene film, thickness 40 microns, Min	Grade 213 of IS: 2508 - 1963†
	Single	Waterproof paper	Type 2 of IS: 1398 - 1960:
2	Single	Light weight hessian	Type II (229 g/m²) of IS: 2818-1964
	Single	Matting ( or CHATTAI)	-
3	Single	Waterproof paper	Type 2 of IS: 1398 - 1960:
4	Single	Hessian-lined kraft paper	Type 3 of IS: 1398 - 1960;
	Double	Waterproof paper	Type 2 of IS: 1398 - 1960 ±
5	Single	Heavy cee cloth	A-1

NOTE — Matting (or CHATTAI) may be used if light weight hessian is not easily available. If matting is used, its smooth surface should be next to the kraft paper.

- 2.1.3 The gross weight of the bale shall not exceed 250 kg.
- 2.1.4 Press the bale to form a sufficiently rigid bale so that it does not itself sag nor do its contents slip.
- 2.1.5 When the bale is still under pressure, sew the layer of light weight hessian and then the layer of heavy cee cloth around the bale with three-ply double jute twine of adequate strength, taking care not to pierce the inner wrappings during sewing. Bind the bale over wooden slats which have been given anti-termite treatment, at right angles to its length and width with 0.9 mm thick and minimum 16 mm wide new 'medium' grade flat steel strips (or hoops) conforming to the requirements of A-2, so that:
  - a) the strips nearest the edges of the bale are approximately 10 cm away from the respective edges;

<sup>\*</sup>Specification for kraft paper.

<sup>†</sup>Specification for low density polyethylene films.

<sup>\$</sup>Specification for packing paper, waterproof, bitumen laminated.

Specification for Indian hemian.

- b) the other strips are equally spaced, at approximately 13 cm from each other; and
- c) the strips are drawn taut and the two ends of each fastened by rivets or other suitable means and the joints so formed wrapped in pieces of hessian.

## 2.2 Hosiery Yarn (Cones) in Cases

2.2.1 Wrap each cone with kraft paper. Place a sufficient number of cones in a wooden packing case conforming to the requirements of A-3, and lined with one layer of waterproof paper conforming to Type 1 of IS: 1398-1960\* and one layer of medium weight hessian conforming to Type I (305 g/m²) of IS: 2818-1964† so that when the case is fully lined up, the waterproof paper forms the inner layer and the medium weight hessian forms the outer layer. The packing materials shall be of sufficient size to fully cover the contents of the case. They shall be in sound, clean and dry condition. If necessary, stuff the voids in the case with paper cuttings so as to prevent undue movement of the contents.

NOTE — To facilitate identification, each cone may be marked with the name of the material, name and trade-mark of the manufacturer, count of yarn and nominal weight of the cone.

- 2.2.2 The gross weight of the case shall not exceed 150 kg in weight.
- 2.2.3 Fold neatly the layer of waterproof paper over the contents of the case to have adequate overlaps. Fold also the layer of medium weight hessian over the layer of waterproof paper. Stitch the ends of hassian with two strands of jute twine of suitable quality. Nail the lid to the case. Bind the case with 0.9 mm thick and minimum 16 mm wide new 'hard' grade flat steel strips (or hoops) conforming to the requirements of A-2, so that:
  - a) at least three strips are positioned parallel to the battens,
  - b) at least two strips are positioned at right angles to the battens, and
  - c) the strips are drawn taut and the two ends of each fastened by rivets and/or other suitable means.

# 2.3 Hosiery Goods (Fabric) in Bales

2.3.1 Prepare rolls or bundles of fabric. Wrap each roll or bundle in kraft paper and tie it securely with cotton or jute twine.

Norm - Rolls are prepared in case of fabrics of long continuous length.

<sup>\*</sup>Specification for packing paper, waterproof, bitumen laminated. †Specification for Indian hessian.

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2.3.2 Arrange a required number of rolls/bundles over layers of packing materials listed in Table 2 adjusting the layers in such a manner that when the bale is finally made up, light weight hessian forms the innermost layer and heavy cee cloth forms the outermost layer. Place similar layers of packing materials over the top of the arranged rolls/bundles. The packing materials shall be in sound, clean and dry condition and shall be of sufficient size to cover the rolls/bundles with adequate overlaps on all sides.

#### TABLE 2 LIST OF PACKING MATERIALS

SL No.	LAYER	MATERIAL	Conforming to
1	Single	Light weight hessian	Type II (229 g/m <sup>2</sup> ) of IS: 2818-1964*
2	Single	Polyethylene film, thickness 40 microns, Min	Grade 213 of IS: 2508 - 1963†
	Single	Waterproof paper	Type 2 of IS: 1398 - 1960‡
3	Single	Heavy cee cloth	A-1

<sup>\*</sup>Specification for Indian hessian.

## 2.3.3 Follow the procedure prescribed in 2.1.4 and 2.1.5.

# 2.4 Hosiery Goods (Garments) in Cases

- 2.4.1 If the goods consist of items, such as socks, stockings, etc, which are sold in pairs, fold the two units of the pair together and place a number of such folded pairs in a cardboard box of suitable size. If the goods consist of other items such as vests, jerseys, etc, fold each garment suitably and place a sufficient number of them in a cardboard box. Close the lid of the box securely.
- 2.4.2 Place a required number of cardboard boxes in a wooden packing case conforming to the requirements of A-3, and lined with one layer of kraft paper and one layer of waterproof paper (or polyethylene film) so that when the case is fully lined up, the kraft paper forms the inner layer and the waterproof paper (or polyethylene film) forms the outer layer. The kraft paper shall conform to Grade 2 of IS: 1397-1960\* and waterproof paper shall conform to requirements of Type 1 of IS: 1398-1960† and polyethylene film to Grade 213 of IS: 2508-1963‡. The packing

<sup>†</sup>Specification for low density polyethlene films.

Specification for packing paper, waterproof, bitumen laminated.

<sup>\*</sup>Specification for kraft paper.

<sup>†</sup>Specification for packing paper, waterproof, bitumen laminated. ‡Specification for low density polyethylene films.

materials shall be in sound, clean and dry condition and shall be of sufficient size to fully cover the contents of the case. If necessary, stuff the voids in the case with paper cuttings so as to prevent undue movement of the contents.

NOTE - Packing case with contents should not exceed 175 kg in weight.

- 2.4.3 Fold the kraft paper and then the waterproof paper (or polyethylene film) over the contents of the case to have adequate overlaps. Secure it with a suitable adhesive. Nail the lid to the case. Bind the case with 0.9 mm thick and minimum 16 mm wide new 'hard' grade flat steel strips (or hoops) conforming to the requirements of A-2, so that:
  - a) at least four strips are positioned parallel to the battens.
  - b) at least three strips are positioned at right angles to the battens, and
  - c) the strips are drawn taut and the two ends of each fastened by rivets or other suitable means.

# 2.5 Hosiery Goods is Cardboard Boxes (for Post Parcel)

- 2.5.1 If the goods consist of items, such as socks, stockings, etc, which are sold in pairs, fold each pair suitably. Put a number of such pairs in a polyethylene bag of suitable size. If the goods consist of other items, such as vests, jerseys, etc, fold each garment suitably and put a number of them in a polyethylene bag of suitable size.
- 2.5.2 Close the opening of the polyethylene bag. Arrange a required number of polyethylene bags in a cardboard box conforming to the requirements of A-4, and lined with one layer of polyethylene film or waterproof paper. The polyethylene film or waterproof paper shall be of sufficient size to fully cover the contents of the box and shall conform to Grade 213 of IS: 2508-1963\* and Type 1 of IS: 1398-1960† respectively. If necessary, stuff the voids in the box with paper cuttings so as to prevent undue movement of the contents,
- 2.5.3 The gross weight of the cardboard box shall not exceed 10 kg unless otherwise prescribed by the postal authorities in the country to which the goods are exported.
- 2.5.4 Fold the polyethylene film or waterproof paper over the contents of the cardboard box to have adequate overlaps. Secure the polyethylene film or waterproof paper with suitable waterproof adhesive. Close and fasten the lid of the cardboard box suitably so as to make the cardboard box airtight. Secure the cardboard box either with an adhesive tape or cotton twine.

<sup>\*</sup>Specification for low density polyethylene films.

<sup>†</sup>Specification for packing paper, waterproof, bitumen laminated.

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- 2.5.5 Cover the cardboard box with one layer of grey cotton cloth of adequate strength. Stitch (with approximately 6 stitches per centimetre) the cloth around the box with cotton sewing thread of adequate strength, taking care not to pierce the box during stitching.
- 2.5.6 Seal the seams of the cloth with sealing wax around the box positioning the seals at equal distance of approximately 10 cm from eac other.

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#### 3. MARKING

- 3.1 Bales, cases and cardboard boxes shall be marked on at least two opposite sides with indelible ink, with the following information, leaving adequate space for marking by railways and postal authorities:
  - a) Leading mark (consignee's name, or initials);
  - b) Port of entry and destination, if other than port of entry;
  - c) Serial number and total number of packages in the consignment;
  - d) Gross weight and net weight of the package;
  - e) Dimensions of the package;
  - f) Manufacturers' name, initials or trade-mark and country of origin;
  - g) Handling mark, such as 'Use No Hooks' (see Note);
  - h) Name of the material and indent number (if required); and
  - j) Any other information required by the buyer or by the law in force.

Norm — This mark is applicable only in the case of bales.

- 3.2 All markings shall be stencilled, writing with hand being not permissible. In the case of bales and cases, the markings 3.1 (a) and (b) shall be not less than 8 sm in height and the other markings shall be not less than 4 cm in height.
- 3.2.1 For post parcels, however, marking shall be legibly written by hand with the letters and figures of not less than 1 cm in height.

#### APPENDIX A

(Clauses 2.1.5, 2.2.1, 2.2.3, 2.4.2, 2.4.3 and 2.5.2, and Tables 1 and 2)

## REQUIREMENTS OF PACKING MATERIALS

#### HEAVY CEE CLOTH

Heavy cee cloth shall conform to the requirements of Table 3.

### TABLE 3 REQUIREMENTS OF HEAVY CEE CLOTH

THREADS TER		Breaking Load, in kg, on 100 × 200 mm Strips		Weave
Weft		Warp Min	West Min	
35	665	160	180	Plain Double Warp
			West Warp Min	West Warp West Min Min

TOLK-+2 +10 percent -BANCE ±4

#### A-2. STEEL STRIPS

A-2.1 'Hard' and 'medium' grade steel strips shall conform to the requirements of IS: 1029-1956\*. The 'medium' grade steel strips shall be painted with one coat of primine rod oxide or red lead paint.

#### A.3. WOODEN PACKING CASE

A-3.1 The packing case shall conform to the requirements of Grade C. style 3(b) packing case prescribed in IS: 1503-1960†. It shall be given anti-termite treatment.

# A-4. CARDBOARD BOX FOR POST PARCEL

A-4.1 Cardboard box shall be fabricated out of solid fibre board of substance 600 g/m<sup>2</sup> and shall conform to the requirements of IS: 2771†.

A-4.2 The dimensions of the cardboard box shall be as follows:

Maximum length Length and girth combined  $= 1.8 \, \mathrm{m}$ 

<sup>\*</sup>Specification for hot rolled steel strips (baling).
†Specification for rectangular solid wood packing cases,
†Specification for fibre board (solid and corrugated) containers, Part I Boxes
(under preparation). Until 'this standard is published, the containers used shall be as agreed to between the buyer and the seller.

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Pushpanjali, First Floor, 205-A West High Co Shankar Nagar Square, NAGPUR 440010 Institution of Engineers (India) Building, 133	·
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<sup>\*</sup>Sales Office in Calcutta is at 5 Chowringhee Approach, P. O. Princep 27 68 00 Street, Calcutta 700072

<sup>†</sup>Sales Office in Bombay is at Novelty Chambers, Grant Road, 89 65 28 Bombay 400007

<sup>‡</sup>Sales Office in Bangalore is at Unity Building, Narasimharaja Square, 22 36 71 Bangalore 560002

# AMENDMENT NO. 1 AUGUST 1966

TO

# IS: 3086-1965 CODE FOR SEAWORTHY PACKAGING OF COTTON HOSIERY YARN AND GOODS

At the draft stage, IS: 2771-1965 'Specification for corrugated fibre-board boxes' included requirements for boxes made of solid fibreboard. Therefore, this standard prescribed solid fibreboard conforming to the requirements of IS: 2771 which was then under preparation. As IS: 2771-1965, when published, idid not cover boxes made of solid fibreboard, modifications in 2.5.2 and A-4 of this standard have now been made through this Amendment. Opportunity has also been taken to rectify some errors in Table 1 and 2.4.2.

## Corrigenda

- (Page 4, Table 1, Sl No. 1, last column) Substitute 'Grade 123 of IS: 2508-1963†' for 'Grade 213 of IS: 2508-1963†'.
- (Page 6, Table 2, Sl No. 2, last column) Substitute 'Grade 123 of IS: 2508-1963†' for 'Grade 213 of IS: 2508-1963†'.
- (Clause 2.4.2, line 8) Substitute 'Grade 123 of IS: 2508-1963‡' for 'Grade 213 of IS: 2508-1963‡'.
- (Clause 2.5.2, lines 5 and 6) Substitute 'Grade 123 of IS: 2508-1963\*' for 'Grade 213 of IS: 2508-1963\*'.

#### Alterations

- (Clause 2.5.2, second sentence) Substitute the following for the existing sentence:
  - 'Arrange a required number of polyethylene bags in a suitable cardboard box of suitable size and lined with one layer of polyethylene film or waterproof paper.'
- (Page 9, clauses A-4, A-4.1 and A-4.2) Delete the clauses and the foot-note marked with double dagger (‡) at the bottom of the page.